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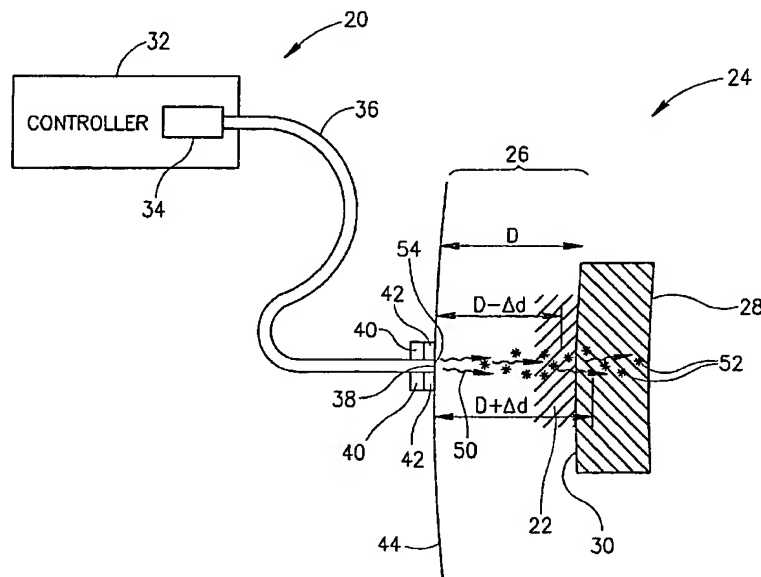
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| <p>(51) <b>International Patent Classification<sup>7</sup>:</b> <b>A61B 5/00</b></p> <p>(21) <b>International Application Number:</b><br/>PCT/IL2004/000034</p> <p>(22) <b>International Filing Date:</b> 13 January 2004 (13.01.2004)</p> <p>(25) <b>Filing Language:</b> English</p> <p>(26) <b>Publication Language:</b> English</p> <p>(30) <b>Priority Data:</b><br/>60/439,435      13 January 2003 (13.01.2003)      US</p> <p>(71) <b>Applicant</b> (<i>for all designated States except US</i>): <b>GLUCON INC.</b> [US/US]; C/O Hogan &amp; Hartson, Columbia Square, 555 Thirteenth Street NW, Washington, DC 20004-1109 (US).</p> <p>(72) <b>Inventors; and</b></p> <p>(75) <b>Inventors/Applicants</b> (<i>for US only</i>): <b>PESACH, Benny</b> [IL/IL]; 18 Shir Hashirim Street, 48072 Rosh-Ha'Ayin (IL). <b>BITTON, Gabriel</b> [IL/IL]; 621/5 Hadaf Hayomi Sterrt,</p> | <p>97279 Jerusalem (IL). <b>BALBERG, Michal</b> [IL/IL]; 19 Nof Harim Street, 96190 Jerusalem (IL).</p> <p>(74) <b>Agents:</b> <b>FENSTER, Paul</b> et al.; Fenster &amp; Company, Intellectual Property, 2002 Ltd., P. O. Box 10256, 49002 Petach Tikva (IL).</p> <p>(81) <b>Designated States</b> (<i>unless otherwise indicated, for every kind of national protection available</i>): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p>(84) <b>Designated States</b> (<i>unless otherwise indicated, for every kind of regional protection available</i>): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,</p> |
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(54) Title: PHOTOACOUSTIC ASSAY METHOD AND APPARATUS



(57) **Abstract:** A method of assaying an analyte in a body part comprising: illuminating the body part with at least one pulse of light at each of first and second wavelengths that stimulates photoacoustic waves in a first, target, region and a second, reference, region of the body part, wherein the reference region interfaces with the target region and has at least one known optoacoustic property and wherein light at the first wavelength is absorbed by the analyte; sensing pressure in the photoacoustic waves from the target and reference regions stimulated by the light at the first and second wavelengths; and using the sensed pressures and the at least one known optoacoustic property to assay the analyte in the target region.

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